

REMARKS

Applicant has amended the claims to overcome the various objections to the claims and drawings cited on pages 2 and 3 of the present office action. The objections will be addressed below in the order in which they were cited.

Regarding the drawings, Applicant maintains that every feature of the claimed invention is shown in the drawings in compliance with 37 C.F.R. § 1.83(a). For example, step (a) of Claims 1 and 17 each recite, "providing a wafer [27] with a plurality of rows [25]" (the bracketed reference numeral examples are inserted for ease of reference to the drawings). The surface of a wafer 27 is shown in Figure 1 and includes a sample row 25. Applicant's specification (page 7, paragraph [0025]) clearly states that this configuration is "repeated for as many rows as are defined on the layout of the wafer 27."

Step (b) of Claim 1 (and, by analogy, in Claim 17) recites, "writing a foreground field [e.g., 41 in Figure 5] with charge-balancing features [21, 23] on the wafer [27], row-by-row [25], to build critical features [31] for a plurality of magneto resistive (MR) devices [29] on each row [25] to define an MR stripe field." Step (c) requires "writing additional critical features [33] that define additional boundaries of the MR stripe field between the charge-balancing features [21, 23]." Finally, step (d) recites, "writing a background field [43] having non-critical features [35] adjacent to each of the critical features [33] to form a charge-balanced, continuous write wafer mask [45]." Each of these steps is progressively illustrated in Figures 1–6, with additional embodiments in Figures 7–10, and the steps are described in Applicant's specification in paragraphs [0026] through [0040].

The following amendments to the claims were made regarding the objections on page 3 of the present office action. To overcome the objection on page 3, paragraph 2, independent Claims 1 and 17 were amended to recite a useful result on their final respective lines of steps (d) (i.e., "to form a charge-balanced, continuous write wafer mask"). Regarding paragraph 3 on the same page, the term "MR" is now defined as "magneto resistive" in both Claims 1 and 17. Regarding paragraph 4, the first set of Claims 1, 6, and 7 were amended to consistently reference

the singular term, "stripe field," while the second set of Claims 17 and 18 were amended to consistently require the plural term, "stripe fields."

Regarding the objection on page 3, paragraph 5 of the office action, the terms "critical" and "non-critical" are common in the industry and understood by those skilled in the art. Briefly, "critical" features are more difficult to form and require greater precision than "non-critical" features. Both Applicant's specification and claims are replete with language that characterizes and defines these terms.

From the very beginning, Applicant's Background on pages 1 and 2 (paragraphs [0002] through [0005]) lays out the problems and requirements for critical and non-critical issues in the context of mask and wafer processing. Applicant's Summary of the Invention on pages 3 and 4 (paragraphs [0006] through [0011]) then summarizes Applicant's solutions to these problems, before describing these aspects in detail in paragraphs [0024] through [0029], [0032], [0037] through [0039], and [0041].

In the claims, the terms "critical" and "non-critical" are generically referenced in independent Claims 1 and 17, before being further developed as specific embodiments in Claims 6, 7, and 9, and Claims 19 and 20, respectively. Each of these claims is fully supported by the specification as cited above.

Finally, regarding the objection on page 3, paragraph 6 of the present office action, Claims 15 and 25 were rewritten to improve their consistency with Figures 8 - 10 and paragraphs [0034] and [0040] of the specification. The angled fields 53 are clearly shown and developed in Figures 8 – 10, and described in the accompanying text in the specification.

It is respectfully submitted that the application is in condition for allowance and favorable action is requested. The commissioner is hereby authorized to charge any additional fees that may be required to **Hitachi Global Storage Technologies' Deposit Account Number 50-2587.**

Respectfully submitted,



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